

1                           **AMENDMENTS TO THE CLAIMS**

2   This listing of claims will replace all prior versions and listing of the claims in the application.

3                           **Listing Of Claims**

4

5   Claim 1 (canceled)

6   Claim 2( canceled)

7   Claim 3 (canceled)

8   Claims 4-10 (canceled)

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10   11. (Previously presented) A method of fabrication of etching a low -k dielectric layer,  
11       comprising the steps of :

12       a)       forming an organic low k dielectric layer over an insulation layer over a  
13               substrate;

14       b)       forming a masking pattern over said organic low k dielectric layer; said  
15               masking pattern having an opening;

16       c)       using an etch process to etch said organic low k dielectric layer through said  
17               opening to form a first opening using said masking pattern as an etch mask; said etch  
18               process comprising:

19                           (1) in a first step, etching said organic low k dielectric layer by applying a plasma  
20                       power and flowing NH<sub>3</sub> and H<sub>2</sub> etch gasses and flowing O<sub>2</sub> or CO gasses.

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22   Claim 12 (canceled )

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24   13. (Previously presented) The method of claim 11 wherein said first step comprises:

25                       a plasma power between 500 and 1500 W, plasma power plasma density  
26               between 1E9 and 1E11 cm<sup>-3</sup>, a NH<sub>3</sub> flow between 50 and 300 sccm, a H<sub>2</sub> flow between 50 and  
27               300 sccm and a pressure between 80 and 800 mTorr and flowing O<sub>2</sub> or CO gasses.

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29   14. (Previously presented) The method of claim 11 wherein said organic low k dielectric is  
30               comprised of a material selected from the group consisting of fluorinated arylether,

- 1        Benzocyclobutene (BCB), amorphous teflon, carbon doped oxides, poly arylene ether (PAE)  
2        and organic Spin on materials.
- 3        15. (original) The method of claim 11 wherein said organic low k dielectric is comprised of a  
4        material selected from the group consisting of fluorinated arylether, and poly arylene ether.
- 5        16. (original) The method of claim 11 wherein said organic low k dielectric is comprised of  
6        carbon doped oxide.
- 7        17. (original) The method of claim 11 wherein said organic low k dielectric is comprised of  
8        poly arylene ether (PAE).
- 9        18. (Previously presented) The method of claim 11 wherein said etch forms said first opening  
10      through said organic low k dielectric layer; said first opening having sidewalls defined by said  
11      organic low k dielectric layer; said sidewalls are substantially vertical at a angle between 87  
12      and 93 degrees to the surface of the substrate; and said first step comprises:  
13                  a plasma power between 500 and 1500 W, plasma power plasma density  
14      between 1E9 and 1E11 cm<sup>-3</sup>, a NH<sub>3</sub> flow between 50 and 300 sccm, a H<sub>2</sub> flow between 50 and  
15      300 sccm and a pressure between 80 and 800 mTorr and flowing O<sub>2</sub> or CO gasses.  
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17      Claims 19-29 (canceled)